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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/700,329	11/03/2003	Marcus da Silva	MN1-0010US	5147

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BROOKS & CAMERON, PLLC  
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MINNEAPOLIS, MN 55403

EXAMINER
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SMITH, SHEILA B

ART UNIT	PAPER NUMBER
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2617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/12/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/700,329

Applicant(s)

SILVA ET AL.

Examiner

Sheila B. Smith

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 23 October 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

1. Claims 1-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Periyalwar (U.S. Patent Number 6,611,695).

***Regarding claim 1***, Periyalwar discloses a wireless communication system, comprising: a multi-beam directed signal system configured for directed wireless communication with a client device; and an antenna assembly configured to receive the directed wireless communication and emanate a directed communication beam for data communication with the client device (which reads on column 2 lines 50-67 and column 3 lines 1-54).

***Regarding claim 2***, Periyalwar discloses a multi-beam directed signal system is further configured to generate a second directed wireless communication to a second client device, and wherein the antenna assembly is further configured to receive the second wireless communication and emanate a second directed communication beam for additional data communication with the second client device (which reads on column 2 lines 50-67 and column 3 lines 1-54).

***Regarding claim 3***, Periyalwar discloses a multi-beam directed signal system is further configured to generate a second directed wireless communication to a second client device; the

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antenna assembly is further configured to receive the second wireless communication and emanate a second directed communication beam for additional data communication with the second client device; and the antenna assembly is further configured to emanate the directed communication beam such that only the client device will receive the data communication, and further emanate the second directed communication beam such that only the second client device will receive the additional data communication (which reads on column 2 lines 50-67 and column 3 lines 1-54).

***Regarding claim 4***, Periyalwar discloses a multi-beam directed signal system is multi-channel and further configured for directed wireless communication with a second client device; the antenna assembly is further configured to emanate the directed communication beam for data communication with the client device via a first channel; and the antenna assembly is further configured to emanate a second directed communication beam for additional data communication with the second client device via a second channel (which reads on column 2 lines 50-67 and column 3 lines 1-54).

***Regarding claim 5***, Periyalwar discloses a multi-beam directed signal system is multi-channel and further configured for directed wireless communication with a second client device; the antenna assembly includes a phased array of antenna elements each configured to emanate a communication beam; the antenna assembly is further configured to emanate the directed communication beam from a first antenna element for the data communication with the client device via a first channel; and the antenna assembly is further configured to emanate a second directed communication beam from a second antenna element for additional data communication

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with the second client device via a second channel (which reads on column 2 lines 50-67 and column 3 lines 1-54).

***Regarding claim 6***, Periyalwar discloses a multi-beam directed signal system is multi-channel and further configured for simultaneous directed wireless communication with a second client device; the antenna assembly is further configured to emanate the directed communication beam for data communication transmission to the client device via a first channel; and the antenna assembly is further configured to emanate a second directed communication beam for data communication reception from the second client device via a second channel (which reads on column 2 lines 50-67 and column 3 lines 1-54).

***Regarding claim 7***, Periyalwar discloses a multi-beam directed signal system is further configured for simultaneous directed wireless transmission to the client device and directed wireless reception from a second client device (which reads on column 2 lines 50-67 and column 3 lines 1-54).

***Regarding claim 8***, Periyalwar discloses a antenna assembly is further configured to emanate the directed communication beam as an electromagnetic signal that includes transmission peaks and transmissions nulls within a coverage area of the communication beam (which reads on column 2 lines 50-67 and column 3 lines 1-54).

***Regarding claim 9***, Periyalwar discloses a antenna assembly is further configured to emanate the directed communication beam as an electromagnetic signal that includes a signal transmission peak within a first coverage area and a signal transmission null within a second coverage area; and the antenna assembly is further configured to emanate a second directed communication beam as a second electromagnetic signal that includes a second signal

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transmission peak within the second coverage area and a second signal transmission null within the first coverage area (which reads on column 2 lines 50-67 and column 3 lines 1-54).

**Regarding claim 10**, Periyalwar discloses a antenna assembly is further configured to emanate a second directed communication beam for the data communication with the client device when the directed communication beam is determined ineffective for data communication (which reads on column 2 lines 50-67 and column 3 lines 1-54).

**Regarding claim 11**, Periyalwar discloses a multi-beam directed signal system is further configured to determine when the directed communication beam is ineffective for data communication with the client device, and is further configured to generate the directed wireless communication for the data communication via a second directed communication beam; and the antenna assembly is further configured to emanate the second directed communication beam for the data communication with the client device (which reads on column 2 lines 50-67 and column 3 lines 1-54).

**Regarding claim 12**, Periyalwar discloses a antenna assembly is further configured to emanate multiple directed communication beams, and wherein the multi-beam directed signal system includes signal coordination logic that monitors the multiple directed communication beams each as an individual access point (which reads on column 2 lines 50-67 and column 3 lines 1-54).

**Regarding claim 13-15**, Periyalwar discloses a multi-beam directed signal system includes signal coordination logic that controls a directed wireless transmission to the client device and directed wireless reception from a second client device such that the directed wireless

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transmission does not interfere with the directed wireless reception (which reads on column 2 lines 50-67 and column 3 lines 1-54).

***Regarding claim 16***, Periyalwar discloses a method, comprising: generating a directed wireless communication for data communication with a client device; receiving the directed wireless communication at an antenna assembly; and emanating a directed communication beam for the data communication with the client device (which reads on column 2 lines 50-67 and column 3 lines 1-54).

***Regarding claim 17***, Periyalwar discloses a generating a second directed wireless communication for additional data communication with a second client device; receiving the second directed wireless communication at the antenna assembly; and emanating a second directed communication beam for the additional data communication with the second client device (which reads on column 2 lines 50-67 and column 3 lines 1-54).

***Regarding claim 18***, Periyalwar discloses a generating a second directed wireless communication for additional data communication with a second client device; receiving the second directed wireless communication at the antenna assembly; emanating a second directed communication beam for the additional data communication with the second client device; and wherein the directed communication beam is emanated such that only the client device will receive the data communication, and the second directed communication beam is emanated such that only the second client device will receive the additional data communication (which reads on column 2 lines 50-67 and column 3 lines 1-54).

***Regarding claim 19***, Periyalwar discloses a generating a second directed wireless communication for additional data communication with a second client device; receiving the

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second directed wireless communication at the antenna assembly; emanating a second directed communication beam for the additional data communication with the second client device; and wherein the directed communication beam is emanated from a first antenna element of the antenna assembly, and the second directed communication beam is emanated from a second antenna element of the antenna assembly (which reads on column 2 lines 50-67 and column 3 lines 1-54).

**Regarding claim 20**, Periyalwar discloses a emanating a second directed communication beam for data communication reception from a second client device, and wherein emanating the directed communication beam includes emanating the directed communication beam for data communication transmission to the client device (which reads on column 2 lines 50-67 and column 3 lines 1-54).

**Regarding claim 21**, Periyalwar discloses a transmitting the data communication to the client device via the directed communication beam; receiving a second data communication from a second client device via a second directed communication beam; and wherein transmitting the data communication and receiving the second directed data communication is simultaneous (which reads on column 2 lines 50-67 and column 3 lines 1-54).

**Regarding claim 22**, Periyalwar discloses a emanating the directed communication beam includes emanating an electromagnetic signal that includes transmission peaks and transmissions nulls within a coverage area of the directed communication beam (which reads on column 2 lines 50-67 and column 3 lines 1-54).

**Regarding claim 23**, Periyalwar discloses a determining that the directed communication beam is ineffective for the data communication with the client device; and emanating a second



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directed communication beam for the data communication with the client device (which reads on column 2 lines 50-67 and column 3 lines 1-54).

***Regarding claim 24***, Periyalwar discloses a transmitting the data communication to the client device via the directed communication beam; receiving a second data communication from a second client device via a second directed communication beam; and controlling transmitting the data communication such that the data communication does not interfere with receiving the second data communication (which reads on column 2 lines 50-67 and column 3 lines 1-54).


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***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sheila B. Smith whose telephone number is (571)272-7847. The examiner can normally be reached on Monday-Thursday 6:00 am - 3:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

S. Smith   
January 7, 2007

  
JOSEPH FEILD  
SUPERVISORY PATENT EXAMINER